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A NARRATIVE
OF
FURTHER EXCAVATIONS AT ZIMBABYE
(MASHONALAND).

ZIMBABWE HILL, SOUTH SIDE,
SHOWING ROCKY PRECIPICE CROWNED BY RUINS.

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A NARRATIVE
OF
FURTHER EXCAVATIONS
AT
ZIMBABWE
(MASHONALAND).

BY
MAJOR SIR JOHN C. WILLOUGHBY,
B.S.A. COMPANY.
Author of "East Africa and its Big Game."

ILLUSTRATED.

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INTRODUCTION.

Before introducing the narrative of my excavations, it may not be amiss to give a short description of Zimbabwe and its surroundings. Zimbabwe Hill, the principal feature of the landscape, is a rocky eminence of granite situated on the south side of the valley of the Umshagashi River, which flows south-eastwards a distance of about four miles from it. Its elevation above the surrounding plain is 350 feet, crowned on its southern and western sides by ruins, and on the north side by the extensive native village of Mgabe, named after its dynastic chief. The valley, some 15 miles long by 10 miles broad, is bounded on the west by broken and thickly wooded hills, of quartz, iron, sandstone, and slate formation, which intervene between it and the plain surrounding the township of Victoria; on the north by a long range of similar formation called the Besa Mountains; on the east by a fine looking group of mountains (the Inyuni Hills); and on the south by low granite hills, forming the fringe of a very broken granite country, separating the high plateau of Mashonaland from the low country

and the valley of the Limpopo River. The principal ruin, forming the large elliptical enclosure which, since its discovery, has been termed the Temple, lies half a mile due south of Zimbabwe Hill, and from the traces of walls and network of ruins, one may suppose it was at some time or other enclosed and connected with the hill itself. A small valley, with many clusters of ruins, intervenes between Zimbabwe Hill and the high ground occupied by the Temple and numerous ruins of lesser importance.

The neighbouring hills, where the rocks permit, are clothed with bush and trees of larger growth; but the numerous valleys formed by the small tributaries of the Umshagashi, are only here and there dotted with clumps of tree vegetation.

I must here deprecate the term 'wilderness,' which has been applied by Mr. Bent to the surrounding country, as one apt to produce a wrong impression upon the minds of all who read his interesting book. 'Wilderness' is a term generally suggestive of that desolation which is associated with a barren soil, and the soil of the parts he alludes to is very fertile; indeed, its capability of growing almost anything is already proved by several enterprising farmers who

have recently been working it. During my visit to Zimbabwe my camp was kept well supplied with potatoes, cabbages, tomatoes, cucumbers, vegetable-marrows, &c., by a recent settler, and with mealies (Kafir corn), pumpkins, beans, and rice by the natives. Naturally the country does not show at its best in July and August, when the long grass is either dried up or burnt off by 'veldt' fires; and Mr. Bent's experience of the 'wilderness' was during those months. But my visit in November was after a few early thunderstorms, accompanied by heavy showers, and the young grass was growing, and everything was at its brightest and freshest best. The valleys and plains, clad in verdant green, were relieved by the varied hues of the new tree foliage, and, where the natives had been growing their crops, by mealie fields and other native cultivations; while the scenery, as a whole, was relieved from any monotone of verdancy by the rugged granite boulders of the distant hills, breaking up the dark greens of their forest background.

As regards the swamps frequently referred to by Mr. Bent, undoubtedly, in the low-lying parts near the Umshagashi River and its little tributaries, there

are marshy tracts containing pools of water which are in evidence long after the rainy season is passed, and where the soil is holding, and not porous enough to permit of natural drainage; some of these maintain their character throughout the driest of seasons.

As this country becomes more opened up and artificially drained, these low-lying tracts should prove a source of benefit to the agriculturist, and should be specially adapted for the growth of rice and other products that require considerable moisture. Mr. Bent certainly saw the country at its very worst, and immediately after what the experience of subsequent years has proved to have been an exceptionally heavy rainy season; added to which, his guide selected the most roundabout and worst possible route to the north of the range of the hills between Victoria and Zimbabwe, keeping close to the Umshagashi River, and consequently passing through the bottom of its valley. Mr. Bent was in consequence delayed considerably by the drifts that had to be made, and was more than a week in compassing a distance of 20 miles.

This has now been altered, and there is an excellent and well-worn "wagon track" through an

easy, though hilly, country, by which the distance between Victoria and Zimbabwe has been shortened to 15 miles, and easily covered on horseback within 2½ hours, or by ox-wagons in a short day's journey.

On the whole, I should say that the surrounding country is fairly healthy, and for Europeans, quite liveable, though the climate does not equal that of the still higher veldt region further north. In the rainy season here, like in many other parts of Mashonaland, Europeans are liable to attacks of fever if subjected to undue exposure and not properly housed: but these attacks are mild, yielding to proper remedies with ordinary precautions, and only becoming aggravated and serious in the event of neglect. I am quite certain that if people at home tried to live as the hardy pioneers and prospectors of Mashonaland have had to do in the early days of its occupation, that is to say, sleeping on wet ground and at times with no shelter overhead, constantly drenched, hard-worked, often fatigued, and usually roughly fed, one half the population of England would soon be dead, and the other half on the sick list. England would then be pronounced an unliveable country on account of its climate. Few

climates in the world could maintain their reputations if subjected to the severe tests which have been applied to that of Mashonaland. My camp, consisting of a wagon, cape-cart, and three patrol-tents (or *tents d'abri*) surrounded by a bush fence, was nicely pitched in a spot convenient for the work I had on hand, being close to the big Temple and to Ruin I. My party consisted of four Europeans, including myself, and about 60 natives, and we had excellent health here during our stay, with the exception of two cases of slight fever: these were scarcely to be wondered at, as soon after my arrival, and before we had time to erect huts, a week of incessant rain caused us to be constantly wet through, day and night. As soon as the rain cleared off, our natives rapidly put up grass huts (commonly called hartebeeste huts), consisting of several poles with their tops interlacing, and roughly covered with long grass, and then we were prepared to meet the subsequent rains. The latitude of Zimbabwe is $20^{\circ} 16'$ South, and the approximate longitude 31° East. Its elevation near the big Temple is approximately 300 feet lower than Victoria, which is 3600 feet above the sea. Mr. Swann, who accom-

panied Mr. Bent, gives the elevation of Victoria as 3200 feet. Now, as Mr. Ellerton Fry, who accompanied the Pioneer Expedition in 1890 for the express purpose of taking those observations, which have since been proved to be wonderfully correct, made the elevation of Victoria 3600 feet by barometer, and as I myself, working with aneroid and boiling-point thermometer, at the same time made out the elevation of that place to be within a few feet of his calculation, I think that it will be found hereafter that the correct elevation is 3600 feet, and not 3200 feet. This is a matter of some considerable geographical importance, for if Mr. Fry and myself are wrong in this instance, probably most, if not all, the presumably known heights taken by us are wrong too, being proportionately over-estimated some 300 to 400 feet. I consider this improbable, as some of Mr. Swann's other observations, as given by him, almost coincide with ours, and I believe (though I am not certain) that he had only an aneroid by which to determine his heights. I think it well to mention the above, hoping that the Geographical Society will not place too much reliance on the accuracy of any observations taken by one person.

**GENERAL PLAN
OF
ZIMBABYE RUINS**

showing
the general position of each ruin

- Previous Excavations
- Excavations done by Sir John Willoughby.
- Roads and Footpaths
- Walls more or less broken down.
- Position of ruins not accurately measured.
- Contours are drawn approximately at intervals of 50 feet

Scale: 105 yards to 1 inch

nope

A NARRATIVE OF FURTHER EXCAVATIONS AT ZIMBABYE (MASHONALAND).

(November and December, 1892.)

CHAPTER I.

MUCH has recently been written about these ruins, and many have been the theories advanced as to their origin and construction. But any practical form of exploration by the process of "opening up" has been so limited, that I venture to think my latest efforts in this direction, though extending only over a period of five weeks, may be worthy of a public record. Zimbabwe is certainly one of the most interesting collection of ruins in the world, not especially on account of any intrinsic merit due to original design or construction, but from its exceptional position when considered with all other monumental relics of great cities, something of which, more or less

definite as to history and origin, is known to archaeological science. But here we regard the evidence of a past that was once full of life and activity, and with which no single tradition has, up to the present day, been connected. Nor have the limited excavations hitherto undertaken revealed any trace by which a presumably once important people, occupying a most important city, can even be classified in a chronological table.

It is a matter for regret that Mr. Bent, who has great experience in archaeological work, was unable to devote more than two short months to his survey of a field so vast and so full of invitation. The solid amount of work required to thoroughly excavate the Temple, with those other most important ruins which occupy the Zimbabwe Hill, would alone involve the best labour of many men, and for a period of not less than two years. But in visiting an entirely fresh field for observation, Mr. Bent was confronted with the necessity of making a general and careful surface survey before deciding upon the first point at which any substratum should be exposed. My visit to Zimbabwe was made with the sole object of excavating certain spots I had previously examined, as

thoroughly and rapidly as possible, and without that caution which the expectation of an "expert's" report demanded.

A glance at the coloured parts of the accompanying Plan of the Temple will show the proportion which the sections now excavated bear to that which remains unexcavated. The General Plan gives the extent and relative positions of the various ruins, and therefore, in conjunction with the Temple Plan, enables the area of excavation to be estimated in connection with the total area of the ground occupied by these ruins.

I arrived at Zimbabwe November 10th, 1892, a time of year most inconvenient to any European desiring to obtain native labour. It was the hoeing season, which always precedes the commencement of the rains, and though the women do all the work, the men seem to consider it their bounden duty to watch the operations and to refuse outside engagements under any circumstances whatever. By a stroke of good fortune, however, I found the Zimbabwe or Mgabe people were in trouble with their neighbours the Amangwa, a small tribe of interlopers

who had recently settled in the neighbourhood. These people, under the protection of Charimbila (a chief of some importance in the district of Victoria), were busily engaged in filching the lands of the Mgabe. A sanguinary (!!) conflict had taken place under the walls of the ruins a day or so before my arrival, in which two of Mgabe's men were actually killed, a most rare occurrence in conflicts of the kind, which usually consist of a good deal of skirmishing, prancing, and shouting, combined with a promiscuous letting off of guns in any direction but that of the enemy. It is noteworthy that the everlasting land question, that has been the origin of feuds from time immemorial amongst all sorts and conditions of men, should likewise prove the cause of constant conflicts between the petty tribes of Mashonaland, a country which contains vast tracts of splendid agricultural soil totally uninhabited, and capable of the easiest form of cultivation.

That one man's misfortune may be another's gain was proved from my being enabled to turn this dispute to useful account, by undertaking to make peace between the rival tribes, and to fix certain boundaries between them, and this on the understand-

ing that Mgabe should give me in return as many native labourers as I might require. Accordingly, the Amangwa people were warned to appear on a certain day at a place of meeting decided upon, and to which I was escorted by Mgabe and some hundred of his followers, about as motley a crew as one could expect to find even in Africa. The majority were armed with old Tower muskets, and the remainder with assegais and bows and arrows, and their chief clothing was their native dirtiness. On reaching the *rendezvous* I was met by the magistrate of the Victoria district, and shortly afterwards about sixty of the Amangwa people, every man armed with some kind of weapon, arrived. The disputants were at once ranged opposite to each other, while we placed ourselves between them to avoid any particular display of enthusiasm resulting in a general conflict. Then, during the downpour of a tropical shower, I listened attentively to the arguments submitted by both parties, and fixed boundaries, which were admitted to give a mutual satisfaction. I further notified that any future transgression of these boundaries, or any act of molestation from either side, would involve such punishment as the Government might

think fit to inflict upon the offenders. The Mgabe people, recognizing the extent by which their force outnumbered that of their opponents, naively requested to be allowed to "go for the Amangwa, while I stood by and saw fair play"!! This perhaps might have proved the most permanent and convenient solution of the whole matter, had I been justified in permitting it.

As, a day or two after this episode, the promised labourers were non-forthcoming, I again sent for Mgabe, and explained that, failing to obtain from him the fifty men I required, I should be forced to engage the services of his late rivals, the Amangwa, as fifty men I was bound to have for the work I was about to undertake. This information was evidently so discomfoting, that on the following day my full complement of labourers presented themselves, and agreed to work during one month in return for a blanket a-piece and their daily food—three pounds of Kafir meal. These terms, considering the work subsequently performed, were certainly not extravagant.

In consequence of my preliminary difficulties, I was unable to make a fair start before the 16th, and

even then I was stopped for nearly one whole week by a continuous drizzling rain. Therefore I only lay claim to one month's complete work, though previous to the 16th I managed a little desultory exploration of the ruins on the hill, amongst the large granite boulders on the south-eastern side, where I was successful in finding two caves. From the one at the most eastern point I obtained a large iron nail, fourteen inches in length, with a well-wrought head three-quarters of an inch in diameter; a heavy trowel-shaped iron instrument, suitable for laying the clay-cemented flooring; an arrow-head of peculiar design, and other arrow-heads of ordinary Kafir form; a fragment of an iron axe-head, and many bones and teeth of animals. In the other cave, which can only be regarded as a chamber of one already discovered by Mr. Bent, because its rocky screen of separation does not quite reach the roof, I found numerous fragments of clay crucibles containing small beads of gold, and some of these were distinguished by a greenish glaze on the outside. In another place, which appears to be a narrow passage about the centre of the ruins and leading up from the precipice, I found fragments of porphyry-coloured

pottery, figured with a necklace of dotted design, and many fragments of bracelets and necklaces, consisting of small rings of iron or copper threaded on fibres, which I believe are Kafir. In my explorations amongst these rocks, like Mr. Bent, I came on several skeletons of Kafirs which were so packed away in crevices as to afford reasonable evidence of this side of the hill being long utilized as a native cemetery. When one of my native labourers begged me not to disturb a spot I had marked for excavation, because his little brother had been buried there during the previous week, I accepted his request as an additional point of evidence, and, of course, left this resting place untouched.

In the most western enclosure, which Mr. Bent has termed the "Temple on the Hill," he refers to an altar, which appeals to me as a structure which still admits of speculation about its original purpose. On its south side the stones are well laid, but on the other sides they are jagged and very roughly fitted: until further excavation enables its relation to its surroundings to be determined, I will only commit myself to the opinion that it may, or may not, be an altar. In excavating other parts of the ruins,

similar fragments of walls presenting a single smooth surface were occasionally exposed, and these were in some instances banked up behind with the red clay cement. What particular purpose they served is a matter of conjecture.

As to the appearance and designs of the ruins on the hill, no remark is needed from me until further excavation has taken place, beyond a reference to that full description of them which Mr. Bent has given in his interesting book. I certainly think that a thorough development of these particular ruins would be productive of most curious, if not important, discoveries.

CHAPTER II.

I will now deal with the principal work undertaken by myself. By a glance at my General Plan of the ruins, it will be seen that a ridge, running slightly westwards of north, forms a connecting link between the big elliptical ruin and Zimbabwe Hill. This ridge is granite, and for the most part the smooth rock is exposed. Throughout its entire extent there appears to have been a more or less connecting chain of buildings, of variable constructive excellence, and terminating at its north extremity, near the hill, on a mound of red soil some twenty feet high, and about ninety feet in diameter from north to south, and rather more from east to west. Previous to my arrival, the only trace of ruins here, which for the sake of reference I have termed Ruin III., was one small stone buttress on the eastern side.

My original intention here was to find any wall foundations that might exist, and then to cross-cut right through the mound at their level from east to west, and from north to south. But I was deterred

from carrying this out, because, as the work proceeded, traces of cement floors at different levels were discovered. By starting low down the mound, I soon came upon a wall, varying in height from four to six feet, which encircled it. The original height of this wall can only be estimated by comparing the existing structure with that fallen debris which was buried by an accumulation of soil. At the foot of this wall, and on the outside, I found many specimens of arrow heads, Kafir pottery, bracelets and necklaces of iron and copper. I also found something which may perhaps prove to be an object of especial interest. This was a piece of copper about six inches in length, a quarter of an inch wide, and an eighth of an inch thick, covered with a green substance (whether enamel, paint, or lacquer, I am unable to determine), and inlaid with one of the triangular Zimbabwe designs. It was buried some five feet below the surface, almost in contact with the east side of the wall itself.

I also discovered a small cave under a big rock that culminates in the highest point of the mound, but the only object of interest here found, besides bits of coarse pottery, was a piece of crystal or glass. On

driving into the mound through a somewhat broken entrance in the outside wall on the west side, I was much puzzled by striking a level cement floor, some four feet above the wall foundations, and on following this level I came upon a second floor, about two feet above the first. It would therefore seem that originally there were a series of cement terraces, one above the other, culminating in a point of observation on the south side, on the summit of the large rock, or that different occupants at varying dates had made new floors. It was near this rock that I came upon one of the few pieces of masonry inside the outer wall, and that only very fragmentary in character. In following the outside wall on its inner side, I found it varied in width between two feet six inches to four feet, and that its foundations also varied much in depth. In the cutting thus made I came upon three small furnace-holes, close together and on a level with the top of the wall as it now stands, the foundations of which increased in depth as I proceeded, and disclosed, here and there, what appeared to be an extensive layer of ashes mixed with the bones and teeth of animals, samples of which I took for subsequent analysis. A notable peculiarity in this

mound is the variety of its stratified soil, with folding concave towards the centre. The surface soil is more or less black; then comes a bright red clay, divided by a broad yellow streak, and below this a dash of yellow, with here and there a vein of decomposed sandstone or other rocky substance. During this excavation I was not very successful in finds, which were only represented by three pieces of sea-green china, one of which was lying in the solid red clay five feet below the surface, and eight to ten feet into the side of the mound, and two dull green porcelain beads, found seven feet deep and near its centre. Taking into consideration the ash beds and furnace holes already referred to, I feel justified in suggesting that once a workshop was here the scene of useful activity, and at that time surrounded by an irregular wall for protective purposes, with a point of outlook to guard against surprise, such as the big rock with the steps leading to its summit would represent.

About twenty yards south of the mound just mentioned, and on the same ridge, I carefully attacked Ruin II., but with a disappointing result. It merely appears to be an enclosure formed by an irregular outside wall, varying in thickness and in the depth

of its foundations. In tracing this wall, the bed-rock was occasionally exposed at a depth of three feet. The only 'finds' here were two small pieces of sea-green, and one small piece of white china, a few Kafir arrow heads, two fragments of pottery, bearing a kind of basket design, and a copper or brass clasp or fastening, which probably formed part of a box of modern date.

After working at the two enclosures referred to for a fortnight, I decided to put all my men on to Ruin I., which I had hitherto only been working with a small gang, though not without some success in the way of finds.

This Ruin, as will be seen by referring to the General Plan, is situated sixty-three yards north of the large Temple, and was formerly connected with it on either side by those walls, which are now in an advanced stage of dilapidation. Evidently it was originally constructed with considerable care, and a portion of the thick outside wall is still in a good state of repair, especially on the West side, where there are traces of a parapet, with a terrace or banquette behind it, on the top of the wall. The west entrance is very strongly built, and especially adapted

OUND PLAN OF I, ZIMBABYE.

Major Sir J. Willoughby B.S.A.C.^y

excavation work.
excavated parts below foundations and
to bedrock.
excavations lettered for reference.
showing above surface before the excavations.
steps, some excavated.
single rows of stones.
filled with stones.
t of ruin.

alls

ale; 18 yards to inch

10 15 20 25 30

Outer Enclosures

HIGH WALL
Filled with Stones
Different levels
Filled with Stones

6"
Clay
Buttress
Stone
Heap
2'6"

Stone
Supports

UND PLAN OF I, ZIMBABYE.

to or below foundations and to Bed Rock (3 to 5 ft.)
to 4 ft. not always down to foundation level
walls
green china were found (4 ft. deep)
pottery with designs were found

; 12 yards to inch

10 15 20

Circu

Valley and Slope Eastwards full of Ruins

GROUND PLAN OF RUIN I, ZIMBABYE. Excavated by Major Sir J. Willoughby B.S.A.C.

- Previous excavation work.
- Completely excavated parts below foundations and mostly down to bedrock.
- Blocks of excavations lettered for reference.
- Main walls showing above surface before the excavations.
- Minor walls, steps, some excavated.
- Foundations, single rows of stones.
- b.b.b. Buttresses filled with stones.
- h. Highest point of ruin.
- e.e.e. Entrances
- s.s.s. Steps
- p.p.p. Passages
- p'p' Terrace on walls

Scale: 18 yards to inch

0 5 10 15 20 25 30

Reference to Numbers

- ① Where soapstone emblems, ditto fragments of bowl, iron dagger, pieces of pottery were found. (6 feet deep)
- ② Painted glass (2 feet deep)
- ③ Glass top of vase beneath foundation (10 feet deep)
- ④ Copper chain (10 feet deep)
- ⑤ Painted glass (4 feet deep)
- ⑥ Copper fittings of box (on bedrock 6 ft. deep)
- ⑦ Soapstone gameboard (5 feet deep)
- ⑧ Three pronged assagai and wedge shaped hammer-head (on bedrock 7 feet deep)
- ⑨ Copper ring and round disc of clay with hole in centre (6 feet deep)

Circular Temple

GROUND PLAN OF RUIN II, ZIMBABYE.

- Excavations down to or below foundations and to Bed Rock (3 to 5 ft.)
- Excavations 2 ft. 6 in. to 4 ft. not always down to foundation level
- Trace or outline of walls
- ① Where fragments of green china were found (4 ft. deep)
- ② Where fragments of pottery with designs were found

Scale: 12 yards to inch

0 5 10 15 20 25 30

for defence; it leads into a small rectangular enclosure flanked by two narrow passages, extending north and south respectively, which could easily have been guarded by one or two men.

The interior of Ruin I. is disappointing from a constructive point of view; and I will merely enumerate its chief peculiarities:

- (i.) An irregularity of design.
- (ii.) An abrupt termination of the inner walls, which form only three sides of an enclosure, with floors ever varying in their relative levels.
- (iii.) An unequal depth of the wall foundations.
- (iv.) A curious conglomeration of buttresses on the south side, which leads up to, and apparently culminates in, the highest point of the outside wall, which partially commands a view of the interior of the Temple, and the large trees by which its tower is almost obscured.

The buttresses referred to are carefully built on the outside, but their interiors are simply filled in with a mass of stones piled one upon the other.

The whole of this ruin I excavated to the limits of its foundation, and sometimes even struck the bed-rock at a depth varying from four to ten feet.

From the lower or northern end my collection of relics include several Phalli ; fragments of soapstone bowls ; fragments of painted glass, which have since been pronounced to date from the thirteenth century ; an iron dagger ; a slab of soapstone, with scooped depressions similar to those required for a game which is even now played by natives upon bare ground ; many fragments of pottery, some with embossed patterns, and far superior to any Kafir pottery of the present day ; iron chisels or wedges ; and the copper fittings of a box, suggestive of a modern date, though they were found beneath a cement flooring and on bed-rock itself at a depth of six feet ; and nails of that primitive type which are headless, and formed by pieces of wire turned down at either end. In the southern or upper end of the ruin my most interesting finds were a piece of copper chain of peculiar fashion, obtained at a depth of ten feet on bed-rock, and near the same place, and at about the same depth, by the foundation of one of the walls, the neck of a glass, vase, or bottle. In another enclosure I found a wedged-shaped iron hammer head, and a curious three-pronged assegai ; these were found close together, at a depth of about seven feet, and on the bed-rock.

PLAN OF TEMPLE BYE

by B.S.A. C^Y

inch
25 30

D PLAN OF ZIMBABWE.

ards to 1 inch
10 15 20

- Walls fixed by prismatic compass, measured by steps uncovered by excavation
- The portion of the ruin excavated & opened
- The total previous excavations
- The portion of the ruin not measured by Mr. Swan's plan & fitted merely taken from Mr. Swan's plan & fitted
- Where fragments of big soapstone bowl (Z) were found
- Prominent Buttresses
- These walls are ornamented with layers alternating with granite
- Enclosure 1 is 56' by 53' inside

- ① Fragments of green china were found (5 ft. deep and 8 ft. from entrance)
- ② Two green beads, porcelain (7 feet deep)
- ③ Assagai, arrow-heads, flint hoes and bracelets were found
- ④ Small clay crucible was found
- ⑤ Bones and teeth of wild animals were found
- ⑥ 20 feet above foot of entrance.
- ⑦ Harder red soil to average depth of 4 feet, were hard baked and interspersed with narrow color.
- ⑧ Different levels.
- ⑨ been a workshop, by the traces of small
- ⑩ es protected by the circular wall, with
- ⑪ rest rock near small buttress.

GROUND PLAN OF ELLIPTICAL RUIN OR TEMPLE ZIMBABYE

by Major Sir J.C. Willoughby B.S.A. C⁹⁵

Scale; 18 yards to 1 inch

0 5 10 15 20 25 30

GROUND PLAN OF RUIN III, ZIMBABYE.

Scale; 12 yards to 1 inch

0 5 10 15 20

- Excavations to foundations or still deeper (+ feet to 11 feet deep)
- Excavations from 3 ft. to 6 ft. below surface & cave
- Excavations from 1 ft. to 3 ft. below surface & cave
- Area of rock exposed by excavations or otherwise
- Dimensions of walls with exception of
- Buttress, totally hidden before excavations
- Fragments of green china were found (5 ft. deep and 8 ft. from entrance)
- Two green beads, porcelain (7 feet deep)
- Assagai, arrow heads, Eafir hoes and bracelets were found
- Small clay crucible was found
- Bones and teeth of wild animals were found

N.B. Highest points, rocks ① and ② about 20 feet above foot of entrance. Soil in places, 1 foot of black mould, remainder red soil to average depth of 4 feet, then yellow mixed with red here and there hard caked and interspersed with narrow veins granulated and of lighter yellow color. Fragments of red clay floors found at different levels. This ruin has the appearance of having been a workshop, by the traces of small furnaces found along the mounds slopes protected by the circular wall, with apparently a look-out place on the highest rock near small buttress.

- Walls fixed by prismatic compass, measured & checked by tape
- Steps uncovered by excavation
- The portion of the ruin excavated & opened up by Sir J.C. Willoughby
- The total previous excavations
- The portion of the ruin not measured by Sir J.C. Willoughby, but merely taken from Mr. Swan's plan & fitted on to the other part
- Where fragments of big soapstone bowl (Zimbabwe design) was found
- Prominent Buttresses
- These walls are ornamented with layers of black stones alternating with granite
- Enclosure 1 is 56' by 53' inside
- Drain running underneath the passage & having an outlet through the steps
- Standing monoliths M's 14'3" total length, stands 10'3" above ground, 4' below the surface 2' being debris
- Steps
- The big tower & The little tower
- Ornamentation on the outside of wall
- The numbers on the walls show the width of same in feet & inches
- The three holes shown in the walls have their lower edges on a level with the old red clay cement floors & incline outwards & downwards at an angle of 2° to 2½°, they appear to be drains

After the completion of my work in Ruin I., I had still ten days left for further excavations, and these I decided to devote to an opening up of the elliptical Temple as completely as the time would permit. After a careful examination I realized that practically no work had been done here, so I determined to start systematically from the north and middle entrances, and the gap between them, as by this means three gangs working close together had three immediate exits, for the removal of all *débris* of stones and every shovelful of earth outside the building, and thus enable any subsequent excavation to be conducted under the least possible difficulties. I was surprised to find that, where the red clay floor was free from any accumulation of *débris*, it could usually be reached after removing from one and a half to two and a half feet of surface soil, and I was most careful about leaving this flooring undisturbed. A quantity of coarse pottery near the surface was declared by my natives to have been manufactured by the Baroutsie tribe, now living north of the Zambesi, but reported to have once occupied the Zimbabwe ruins. My only important finds during the ten days' work of excavation were two large frag-

ments of a big soapstone bowl or tray, bearing a double row of the Zimbabwe herring-bone design, but I uncovered two holes in the walls which were similar to the one discovered by Mr. Bent, on which Mr. Swan has chiefly based his theory of the ornamentation of the Temple. Of these, the first was in the outer, and the second in an inner wall, and both with their lower edge on the inside, flush with the red flooring, and inclining outwards and slightly downwards. It appears to me that, as the ancients must have made some provision against the tropical rains, these drain-holes formed the necessary outlets. I also discovered a small drain underneath one of the inner passages, with an outlet in the centre of a step running across the passage. It seems quite impossible that this large enclosure, or that most of its inner enclosures, could have been roofed in, on account of their size, and as the whole inclines slightly down to the north-east end, without some system of drainage on that side the lower part would certainly at times have become flooded.

My plan of that part of the Temple in which the walls are coloured yellow, was made by prismatic compass observations, carefully checked by tape mea-

INTERIOR OF BIG TEMPLE LOOKING EAST.

surements. Any plotting of its remaining portion could not have been accurate unless the jungle overgrowth had been previously removed, a task my time did not allow me to undertake. That the interior enclosures of the Temple differ in shape from those which are delineated in Mr. Swan's plan, is due to my being enabled to trace the courses of the walls with accuracy after I had sufficiently cleared them. I cannot agree with Mr. Swan's theory that the north end of the Temple has been rebuilt, and probably not on the old lines, but on a contracted circle, through want of sufficient stones. The southern walls appear to me to be as well built as the northern, though there is a marked difference in the degree of thickness. This may possibly be explained by the fact of the south side having been additionally protected by several outside walls, connecting the Temple with the network of buildings on that slope of the valley, and, therefore, it might have been thought unnecessary to make the main wall of the Temple especially strong in this direction. Neither can I see any reason to suppose that the interior enclosures are of a later date than the main wall itself; they appear to me to be of an equally careful construction, and the only

signs of any later work I could detect were a gap in a wall, which had been roughly built up, and a blocking-up of what was possibly an entrance through the wall of one enclosure.

I cannot endorse Mr. Bent's statement that there is very little *débris* or accumulation of fallen stones, such as one would expect to find, for, on the contrary, wherever I excavated I found an abundance of fallen stones, chiefly buried by soil deposits, and doubtless large quantities had been carried off and utilised for the erection of many roughly-constructed walls and enclosures, which are interspersed amongst the numerous exterior ruins of minor importance. I can hardly suppose that, if the inhabitants of a later date had the energy necessary to reconstruct such a large portion of the walls of this Temple in the substantial and well-built manner shewn by their present condition, they would have lacked sufficient energy to do the work thoroughly on the old lines, even supposing they had to fetch more stones for the purpose from some little distance. Added to this, I think there would necessarily be some trace of the old walls left, and some distinct line in the walls where the older portions join the reconstructed parts, but

so far as I could see there was no sign of anything of the kind.

With Mr. Swan's suggestion, that the inhabitants of Zimbabwe obtained their gold from the recently discovered gold belt of Victoria, I entirely disagree. Though the gold belt, now known to extend for at least eighty miles, with a breadth varying from ten to fifteen miles, has its nearest point within five miles of Zimbabwe, there are no traces of old workings anywhere throughout its whole area, and its reefs, up to their recent discovery, were "virgin" reefs. Therefore, the Zimbabwe people must have obtained all their gold from the many old workings of the more remote gold belts, though they may possibly have obtained some small portion from washings in the beds of the numerous intersecting streams. More recently, the occupier of a neighbouring farm claims to have discovered an alluvial goldfield within six miles of Zimbabwe; whether he is right or not has not yet been determined.

A short time back the discovery was made of an old soapstone quarry, about fifteen miles N.W. of Zimbabwe. This most likely provided the material for the numerous soapstone beams or slabs, bowls,

Phalli, &c., &c. When first quarried, the stone is very soft and easily cut with a knife, and it only becomes hard after some exposure to the atmosphere. I believe it will prove most useful for building purposes in the neighbouring township of Victoria.

I think it is premature to conclude that the ancient inhabitants carried away their dead, and that in consequence there is no cemetery at Zimbabwe. The neighbourhood of the ruins must be carefully explored before this can be determined, for at present, almost every time one takes a stroll over the ground one discovers some fresh trace of ruins. By referring to my General Plan, it will be seen that I have been able to locate several large clusters of ruins in the valley itself which had hitherto been unnoticed. This, perhaps, is explained by the fact that at the time of year when Mr. Bent and most others have visited Zimbabwe, the valley is overgrown with very long grass, which, in conjunction with their jungle growth, would hide many of the ruins from view.

Mr. Bent mentions some clay whorls, and also speaks of solar discs, but whether referring to the same objects, or not, I cannot say. I found several

hard clay discs, having a small hole in the centre, but these are without doubt nothing more nor less than portions of Kafir spindles, used by the natives of even the present day in spinning bark fibres, and thread made from the wild cotton which is to be found in different parts of Mashonaland.

I exposed the longest of the two monoliths mentioned by Mr. Bent as standing in the big Temple. Mr. Swan gives its length as 15 feet ; I made it by tape measurement 14 feet 3 inches. It stands 10 feet 3 inches above the accumulated soil, and 12 feet 3 inches above the top of the old cement floor.

CHAPTER III.

Amongst the many problems suggested by the excavation of these ruins is that of how the inhabitants sheltered themselves. So far no trace of roofing has been discovered, and indeed, as before said, I think the size of the enclosures precludes the possibility of their having been roofed, added to which, the majority form only three sides of a quadrangle. Possibly the inhabitants built their huts or houses within these enclosures, one or more being occupied by each family. It is unreasonable to suppose that they lived within the open walls without shelter, and exposed to the tropical downpours of the rainy season.

Another question is, whether the original inhabitants made red cement floors, or used the bed-rock as a flooring. The fact that I found many implements, pottery, and other relics on the bed-rock itself, below the cement flooring, would lead me to imagine that the bed-rock was once the only flooring used, and the one consisting of red cement was of a later occu-

pation. Wherever the bed-rock was encountered I found it had never been cut away, but that the wall foundations followed its surface outline. In places where the bed-rock was too deep to be utilized as a foundation, the wall stands on a bed of clay, and where extra strength was required, the stone foundations protrude on one or both sides some two feet. These are built in a very rough way compared to the walls above ground, no care being taken to make their exterior surfaces smooth. I could find no trace of chisel marks or hammer dressing on the building stones, and yet the exterior planes of the walls are even and smooth, with each stone carefully selected to fit that immediately adjacent to it, great attention having been paid to the joints, the stones overlapping one another with perfect regularity. This only applies to the exterior, for though each stone on the outside is as regular and square as if it were hewn, its three other sides are irregular and broken.

The absence of any quarry from which the stone was obtained is not to be wondered at, for everywhere in the neighbourhood, and particularly in the valley to the eastwards, huge slabs or scales of granite, varying in thickness from one to twelve inches, are

lying about ready to hand. These often have their thinner edge lengthways perfectly straight, and on their broader sides are flat and smooth, and on being broken up, leave fractures which are more or less even, and squared at the edges. Many slabs are slightly curved on their thinner side, and it was from such pieces, probably, that the material for the rounded buttresses and stairways were obtained.

Almost all the wall outlines are elliptical, with their angles well rounded off and occasionally strengthened by small buttress foundations, such as are also found in the centres of many of the walls of greater height and length. The majority of these walls, notwithstanding their careful construction, have so bulged in places, that it is difficult to determine their true courses and the correct trace of the maze-like passages. I cannot say whether they were built geometrically, on some definite design, or not, but the mathematical precision shewn in the construction of curved steps and entrances with their parallel buttresses, incline one to think that some method was displayed in the construction of the whole and its relative parts, except where the out-cropping rocks have been utilized.

How it came about that the original inhabitants of fortresses which could never have been carried by assault, are without any place in legendary history, is a question which at present only admits of mere guesswork. They may have been starved out by a hostile force, decimated by some epidemic, annihilated by the uprising of that vast slave population which they undoubtedly owned, or rendered helpless through failure of their water supply. Yet at the present time this supply is fairly plentiful, and readily obtained from a small spring near the Temple, or from large springs or water-holes near the hill, or from a stream which traverses its north-west slopes. There is, in addition, a good stream, some six hundred yards East, which drains the valley between the hill and the slope occupied by the Temple.

It is also possible that some vast invading force prevented any continuance of that gold industry upon which the prosperity of Zimbabwe may have materially depended. In such event the inhabitants, finding their occupation gone, their source of wealth destroyed, and their supply of provisions and coast communication threatened, might have decided to abandon their strong positions as untenable, and to

evacuate the country. I am the more inclined to favour this notion, after a careful consideration of the state of many of the old workings throughout Mashonaland. On clearing the accumulated *débris* from such workings, the reefs have generally been found still existing, *i.e.*, neither pinched out, nor worked out. Many such reefs, containing rich gold, have since been found continuing at still greater depths, by sinking and driving at a level far below that reached by the old workings. That they were abandoned because the workers lacked appliances necessary for exposing deeper levels than those they have already reached, is also most improbable, for many of the reefs on which there are old workings, occupy hill-ranges which could be proved to great depths without the machinery and appliances necessary for deep mining in more level country. At the bottom of some of these old workings, earthenware panning dishes, still showing traces of gold, and rough implements have occasionally been found, which may perhaps be taken as evidence of a hasty evacuation. I therefore hold to the opinion that the ancient miners were swept away by a sudden and overwhelming tide of invasion, that ruined by one fell

swoop their then existing gold industry. There is no evidence of any revival of this industry having taken place before the recent British occupation of Mashonaland.

An expert's classification of the existing Flora might assist later inquiries into the origin of these Ruins, for I have noticed many trees and plants in their neighbourhood which are not common to other parts of Mashonaland, and which might prove to be foreign to its soil. Some form of inscriptive record would undoubtedly be of the greatest service, and until the work of excavation has been thoroughly completed, I shall hopefully regard such a discovery as being possible.

There are one or two points concerning the present inhabitants of Mashonaland, upon which I may touch without presumption before concluding this narrative, although many of my opinions must differ from those already expressed by Mr. Bent, and particularly as to the question of the generic or national name of the natives.

He states that their real name is 'Makalanga,' and that 'Makalaka' is a corruption for which certain Europeans are responsible. Now, such a word as

‘Makalanga’ is absolutely never used by the natives of the country. Throughout the low country, from Tuli to Victoria and even much further north, on the high veldt the natives invariably term themselves ‘Mākālākā’ or ‘Mākālāka,’ unless using the name of their petty chief, which, as Mr. Bent justly observes, is in most cases dynastic.

The Matabele, or more correctly speaking, according to their own pronunciation, the ‘Amandebele,’ in their own country, do sometimes speak of the Mashonas as ‘Amakalanga,’ but more generally as ‘Makalaka,’ or ‘Maholi’ (slaves). Since our occupation of the country they sometimes term them ‘Amaswina,’ or ‘Amashwina’ (dogs), and with an invariable explanation as to “the reason why” which is referable to our use of the word Mashonaland, the origin of which I am quite unable to account for, as there is no native throughout the country who calls himself a ‘Mashona.’ Further north still, the use of the term ‘Makalaka’ is very rare, and the natives, when asked their name, never get beyond giving that of their tribal chief, which, as one approaches the Zambesi, ceases to be dynastic, each succeeding chief retaining his own name, and consequently causing great dis-

crepancy and confusion in the names of places on the various maps in existence. Mr. Selous and other well-known explorers of the country, who have spent years in it, will bear me out in my statement, that there is no such word in any of the Mashona dialects as 'Makalanga.' Mr. Bent, I think, must have received his information on this point from a Matabele, or his mistake may be accounted for by the fact that the native invariably repeats a word as pronounced by the questioner, whether it be correctly pronounced by him or not. For instance, the native, on being asked the name of his people, would probably reply in the indistinct way of pronunciation they have, Makalāka slurring over the last syllable ; Mr. Bent mistaking the word as pronounced, and taking it to be Makalanga, would repeat the word as he thought it pronounced, and in a questioning way, whereupon the native would say yes, Makalanga, although he could never have heard the word so pronounced before. This peculiarity of the native, *i.e.*, his habit of repeating names as pronounced by the person trying to find out the correct names, and his aversion, through excessive politeness perhaps, to correct any error in pronunciation, is one of the chief difficulties of the

would-be explorer in South Central Africa in endeavouring to ascertain the correct names of places, or the true pronunciation of words in the native dialects. Almost each tribe has its own peculiar dialect, and that of the neighbourhood of Zimbabwe is hardly intelligible to natives of Northern Mashonaland; the most useful language is Setabele, the dialect of the Matabele, and a corrupted form of Zulu. Although not in general use, there are nearly always a few who speak it in every kraal throughout the country. On approaching the Zambesi the confusion of languages increases, and it becomes generally necessary for the traveller to pick up an auxiliary interpreter at each successive kraal arrived at. Mr. Bent refers to the word *piccanini* as a term of native origin. In this word he has made the opposite mistake; 'piccanini' is not a term proper to the native dialects, but one which was introduced by the white man and adopted by the native.

He also says 'Morunko' and 'Molunko' are the native terms used for a white man. The correct pronunciation is 'Malungu,' and further north, towards the Zambesi, 'Marungu.' On the Zambesi itself we find the word 'Mazungu' in frequent use,

to denote Portuguese half-castes, whether they be almost white or totally black. A white man, *i.e.*, a European, is called in distinction from the 'Mazungu,' 'Nyamatenga,' which term implies 'one who has crossed the sea with wings (sails).' Mr. Bent refers to the Mashona's god, 'Muali,' but throughout the country the natives know no God. The 'Muali' of the south, and the 'Molemi' of the north, is merely a vague sort of spirit, of both good and evil repute, who is supposed to be the prompter of every action, good, bad, or indifferent. They neither reverence nor believe in the shades of their ancestors, beyond a superstition that the ghosts of some folks' fathers and forefathers are able to annoy their descendants. Witchcraft obtains throughout the country, as the chief and almost sole belief of the people. The ordeal any suspected person is put to is the swallowing of a nauseous drink, and his guilt or innocence is established by the effect this drink has upon him. If the verdict be 'guilty,' the criminal is simply expelled from his tribe and his goods are confiscated, though further north, in Portuguese territory, he would be beaten to death with sticks and knobkerries by the old women and young boys. The

Mashona of the present day is indeed a poor creature, and apparently without any good instincts or feelings. The only emotion he appears to understand is that of abject cowardice and fear; any wrongful act which is not promptly punished is never regarded as a merciful leniency, but as fearfulness on the part of the person wronged, and an encouragement for further evil-doing. This no doubt is due to his having been brutalised and degraded by a long course of raiding by the Matabele, until he has become little better than the hunted beast.

That the Mashonas are incapable of improvement I do not believe, for I am of opinion that there is some good buried beneath a stiff surface of evil, which time and patient labour may develop into a prominent position. It is noticeable that such Mashonas as have been enslaved by the Matabele from early boyhood, and after a long period of servitude made 'freed-men,' are very superior to the average specimens of their race, for they are more industrious, more trustworthy, more truthful, and less cowardly. That it is hopeless to try and improve the adult raw Mashona I readily admit, as he has no wants beyond a blanket or two, a wife or two,

a few beads, a pinch of salt, and a sufficiency of Kafir beer. With these he is perfectly content to drone through life, and can only with difficulty be persuaded to attempt the simplest kind of work. There is but one way to improve the race, as far as I can see, and this is through the children, many of whom are naturally intelligent. It is my earnest hope that the missionaries now in the country will combine their chief energies in this direction, and that before long many schools for educating the rising generation will be in stages of active progression. I feel certain that a useful and industrious community may, by these means, be evolved from the present thieving, lazy, lying, and cowardly representatives of the Mashona race.

LIST OF ZIMBABYE RELICS

*Discovered in the course of Five Weeks Excavations by
Major Sir John C. Willoughby, B.S.A. Company.*

MARKED

5. *Large iron nail*, from cave on the hill.
6. *Iron trowel* „ „
7. *Iron fragments* „ „
14. Portions of copper and iron necklaces and bracelets, found in
passage and cave on the hill.
27. Quartz, found in caves and ruins.
28. Clay fragment of Phalli, found on the hill.
56. Eleven pieces of *crucibles, showing gold* from cave on the hill.
68. Two Kafir spindles, found in cave on hill.
69. Pottery with design, found in passage on hill.
70. Two pieces of pottery, rough design. Passage on hill.
71. Six pieces of rough pottery, from Ruins on hill.
72. Rough piece of pottery, with design. Ruins on hill.
73. Porphyry-coloured pottery (superior), with dotted design.
Passage on hill.
74. Nine pieces pottery, dotted design. Passage on hill.
75. Two pieces pottery (black), Zimbabwe design. Cave on hill.
76. Two pieces pottery (superior), porphyry colour. Cave on hill.
77. Two pieces rough pottery, with design. Passage on hill.
78. Seventeen parts of crucibles, found in cave on hill. One
piece shows gold.

- 79. Pieces of iron, found in cave on hill.
- 80. Fragments, handle, and button top of pot. Ruins on hill.
- 81. Gold flux, found in cave, with crucibles.
- 111. Large fragments of *soapstone bowl*, with Zimbabwe pattern, found near N.E. entrance of circular temple.
- 113. A few plain and ornamental fragments of pottery.

R U I N I I I.

- 1. Iron weapon heads.
- 2. Iron fragments of hoes and assegais.
- 3. Kafir needles and arrow head.
- 4. Fragments of iron.
- 9. Iron spear heads.
- 25. Quartz, from small cave.
- 32. *Piece of green china*, 5 feet deep, 12 feet into Ruin III.
- 33. *Porcelain beads*, 6 feet deep, in hard red soil.
- 34. *Copper green-enamelled bodkin*, ornamented with Zimbabwe pattern, found at base of wall outside.
- 39. Bracelet, copper, complete.
- 40. Bracelets, iron. Ruins II. and III.
- 41. Copper bracelet fragments.
- 63. *Small pieces of green china*.
- 64. Two bits of coarse pottery with design.
- 65. Three clay discs, portions of Kafir spindles.
- 66. Clay pot or crucible, found deep in the centre of Ruin.
- 67. *Clay top* to a pot.
- 112. Box of earth ashes and bones for analysis.

R U I N I I.

10. Fragments of iron.
23. Soapstone, with leaf marks.
24. Soapstone, with faint trace of design.
38. *Two pieces of green china*, found deep in Ruin.
42. *Green china*, found deep in Ruin.
59. Fastening hinge, 4 feet deep.
82. Pottery, three pieces (fitting), with design.
83. Kafir spindle disc.
84. Two pieces coarse red pottery.

R U I N I.

8. Kafir hoe.
11. *Three-pronged spear* (found on bed-rock, 8 ft. deep).
12. Iron chisels (?).
13. *Iron hammer head (wedge-shaped)*, found on bed-rock, 7 feet deep.
15. Iron hoe, found below cement floor, bed-rock.
16. Portion of soapstone bowl, found in (A) enclosure.
17. Do. " "
18. Do. " "
19. Do. " "
20. Ball (probably used for grinding corn), found close to bowl
23 (A) enclosure.
21. Soapstone game board.
22. Do. "
26. Stone wedge or chisel.

-
29. *Painted glass*, found 2 feet deep. The British Museum has determined that this belongs to the 13th century.
 30. *Neck of vase*, found 10 feet deep.
 31. *Dagger*, 5 feet deep, enclosure (A).
 35. *Painted glass*, 5 feet deep. Also of the 13th century.
 36. Four broken Phalli.
 37. Four complete, though broken, Phalli.
 43. Fragments of incomplete Phalli.
 44. Five whole Phalli.
 45. Six „
 46. Three „
 47. Three „ (small).
 48. Soapstone miniature bird (?)
 49. Emblem copy of Tower (?)
 50. Soapstone fragment, with pattern.
 51. Two soapstone „ „
 52. Two soapstone moulds.
 53. Three soapstone fragments with holes.
 54. Soapstone fragment, with trace of carving.
 55. Soapstone fragments.
 57. *Fittings of box (copper)* with *rude nails*, found on bed-rock 7 feet deep.
 58. *Clasp of box*, found in same place.
 60. Clay nobs.
 61. **Slave (?) chain**, 10 feet deep.
 62. Copper ring, found on bed-rock, 7 feet deep.
 85. Two pieces (fitting) pottery, with design.

86. Two odd pieces pottery, with design.
87. Two pieces pottery, thick and rough design.
88. Two pieces pottery, fitting (rough).
89. Nine pieces pottery (rough), no design.
90. Piece of pottery with design.
91. Very superior piece of pottery, Zimbabwe design.
92. Four pieces rough pot, with design.
93. *Peculiar top of pot*, with knob loose.
94. *Three pieces (fitting) of lid to pot*.
95. Seven pieces of lids to pots (odd) (marked I.)
96. *Four pieces* (fitting each other) of pottery, with *embossed pattern*.
97. Three " "
98. Three " "
99. Two " "
100. Two " "
101. Six odd pieces of pottery, with *embossed pattern*.
102. Six " " " "
103. Three pieces, with *embossed knobs*.
104. Two pieces of pottery fitting each other.
105. Three " "
106. One piece of a pot.
107. Three pieces fitting piece 90.
108. One piece fitting on to 90 and 91.
109. Two pieces, one fitting 90 and 91.
110. Twelve pieces, possibly portions of pot. 90-93.

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